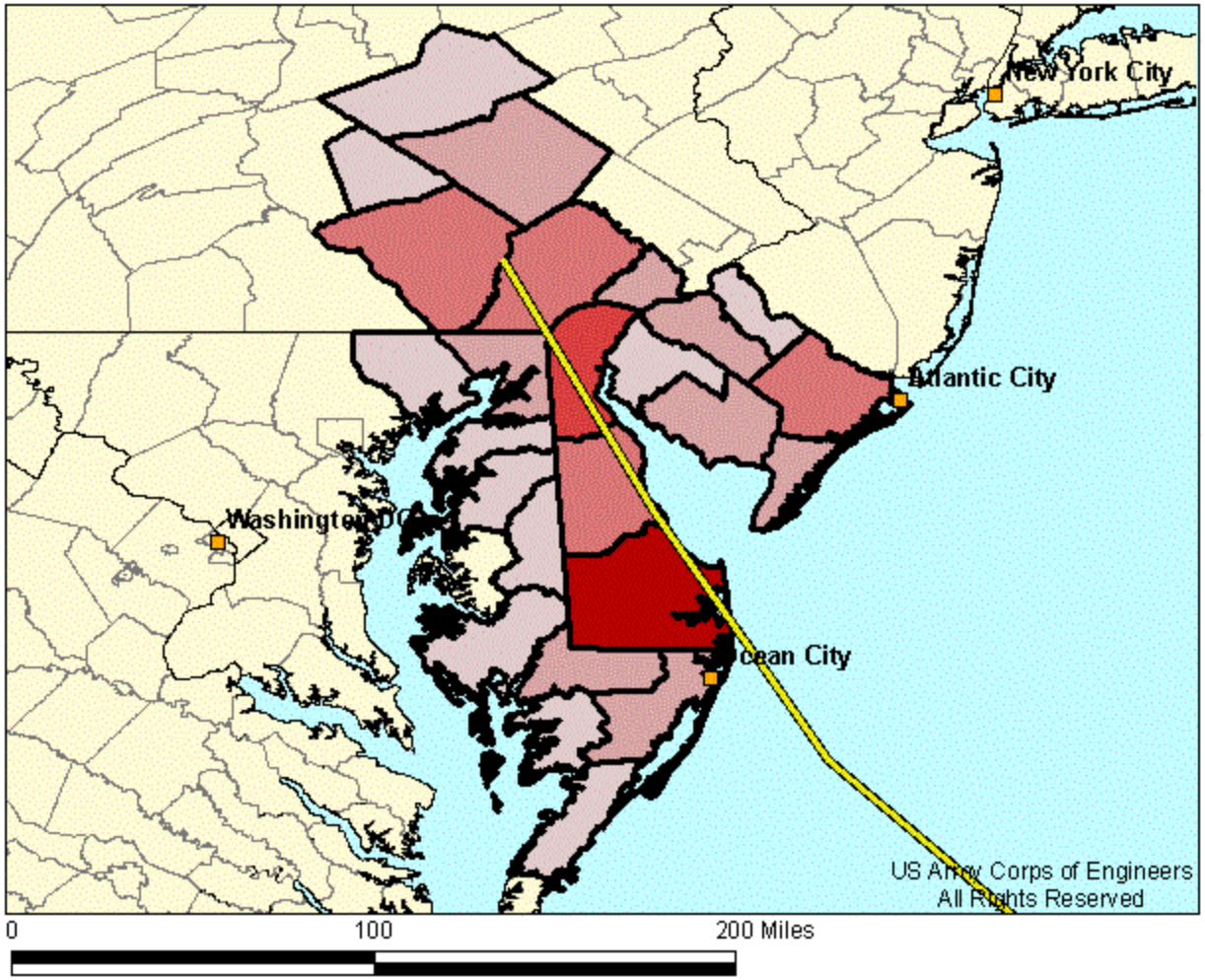
US Army Corps of Engineers

Hurricane DE#1 Debris Model

Landfall Plus About 12 Hours

For Planning Purposes Only!



Post Landfall Debris Model Results

Delaware - 4,351,000 Yards
New Jersey - 1,088,000 Yards
Pennsylvania - 1,042,000 Yards
Maryland - 413,000 Yards
Virginia - 25,000 Yards

Model results per County on following page

This model is based on a Category 1 storm making landfall in Delaware Bay area.

Historic Track

Debris

- < 100,000 cubic yards
- 100,000 - 249,999 cubic yards
- 250,000 - 499,999 cubic yards
- 500,000 - 999,999 cubic yards
- >1,000,000 cubic yards

Information provided on this page displays a Category 1 storm making landfall in Delaware Bay area. These projections are based on information from the NHC (1030 EDT 05/19/2008) forecast. The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

Details about this model may be obtained at http://www.englink.usace.army.mil
or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane DE#1 Debris Model	
Generated By: Siemsen, LRL 1100 EDT 05/19/2008	
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US Army Corps of Engineers

Hurricane DE#1 Debris Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Yards per State	County	Yards per County
Delaware		Kent	280,000
		New Castle	674,000
		Sussex	3,397,000
Delaware	4,351,000		
Maryland		Caroline	29,000
		Cecil	110,000
		Dorchester	3,000
		Harford	27,000
		Kent	9,000
		Queen Anne's	12,000
		Somerset	6,000
		Wicomico	103,000
		Worcester	114,000
Maryland	413,000		
New Jersey		Atlantic	343,000
		Camden	39,000
		Cape May	212,000
		Cumberland	184,000
		Gloucester	225,000
		Salem	85,000
New Jersey	1,088,000		
Pennsylvania		Berks	147,000
		Chester	334,000
		Delaware	195,000
		Lancaster	322,000
		Lebanon	42,000
		Schuylkill	2,000
Pennsylvania	1,042,000		

State	Yards per State	County	Yards per County
Virginia		Accomack	25,000
Virginia	25,000		

The amount of debris forecasted is possible total volume, not necessarily the volume that may need to be removed with Federal funds, but does not include volume that may be covered by private insurance. Debris volume may include storm surge generated debris.

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Hurricane DE#1 Debris Model

Generated By:
Siemsen, LRL 1100 EDT 05/19/2008

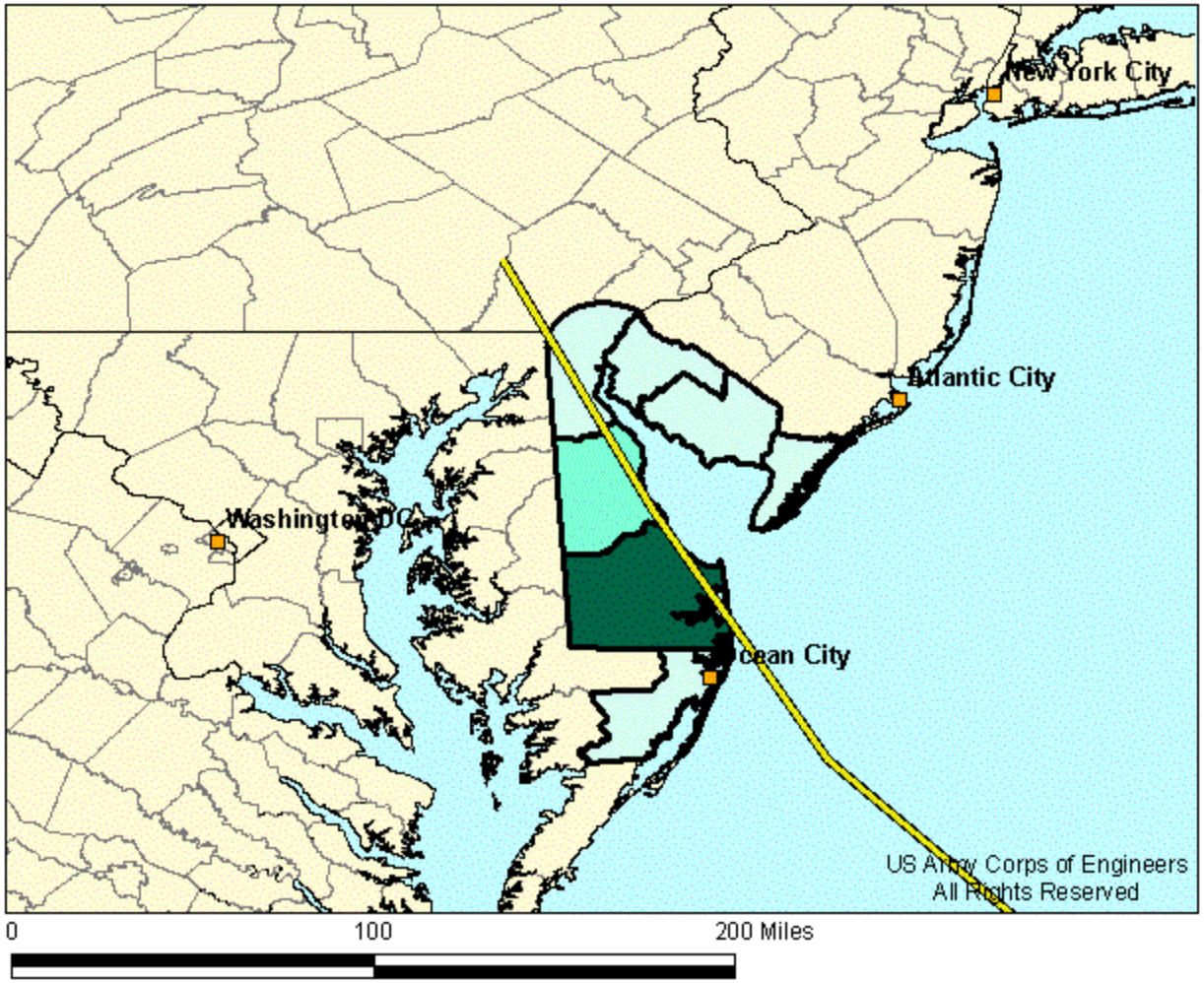
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane DE#1 Commodities Model

Landfall Plus About 12 Hours

For Planning Purposes Only!



Post Landfall Water Model Results

Day One / Day Two / Day Three
DE – 27/53/106 Truckloads
NJ – 2/3/6 Truckloads
MD – 1/1/2 Truckloads

Model results per County on following page

This model is based on a Category 1 storm making landfall in Delaware Bay area.

Historic Track

Commodities
- < 5 Trucks Each
- 5 - 10 Trucks Each
- 11 - 20 Trucks Each
- 21 - 40 Trucks Each
- > 40 Trucks Each

Information provided on this page displays a Category 1 storm making landfall in Delaware Bay area. These projections are based on information from the NHC ***(1030 EDT 05/19/2008)*** forecast. The amount of commodities forecasted is based on Mission Guide Book requirements and SME input. The graphic represents single day needs with full distribution system in place and operating.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane DE#1 Commodities Model	
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US Army Corps of Engineers

Hurricane DE#1 Commodities Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Truckloads per State	County	Truckloads per County
Delaware		Kent	10
		New Castle	3
		Sussex	93
Delaware	106		
Maryland		Worcester	2
Maryland	2		
New Jersey		Cape May	4
		Cumberland	1
		Salem	1
New Jersey	6		

The amount of commodities forecasted is based on Mission Guide Book requirements and SME input and the above table indicates suggested needs based on phased deployment of a commodities distribution system.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane DE#1 Commodities Model

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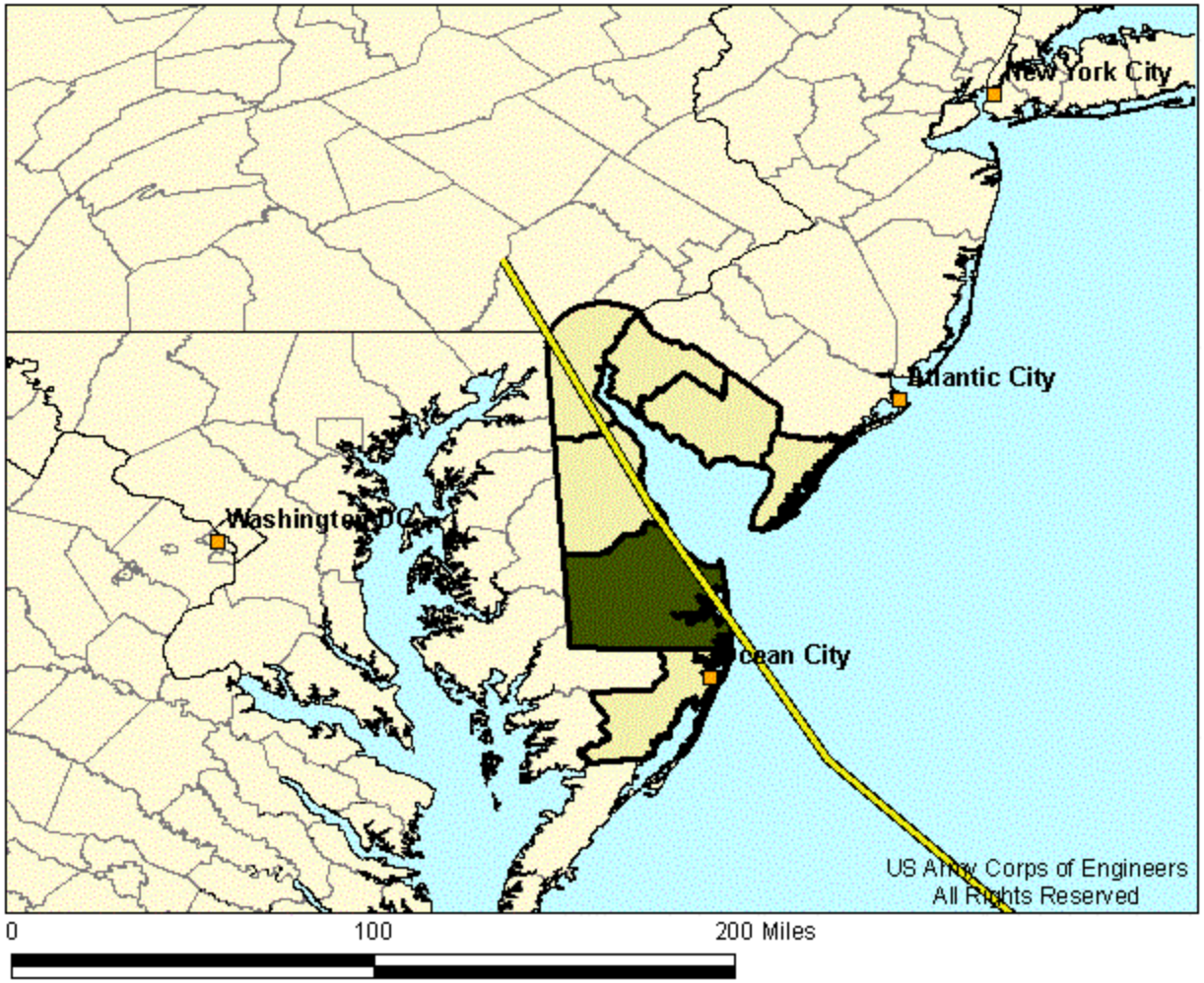
Sources:
HURREVAC
LRL-DEBRIS

US Army Corps of Engineers

Hurricane DE#1 Temporary Roofing Model

Landfall Plus About 12 Hours

For Planning Purposes Only!



Post Landfall Temporary Roofing Model Results

Delaware - 14,700
New Jersey - 700
Maryland - 400

Model results per County on following page

This model is based on a Category 1 storm making landfall in Delaware Bay area.

Historic Track

Temporary Roofing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall in Delaware Bay area. These projections are based on information from the NHC (1030 EDT 05/19/2008) forecast. Temporary roofing is based on 3% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

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US Army Corps of Engineers

Hurricane DE#1 Temporary Roofing Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
Delaware		Kent	1,400
		New Castle	300
		Sussex	13,000
Delaware	14,700		
Maryland		Worcester	400
Maryland	400		
New Jersey		Cape May	700
		Cumberland	< 100
		Salem	< 100
New Jersey	700		

Temporary roofing is based on 3% in CAT 1.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane DE#1 Roofing Model

Generated By:
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Sources:
HURREVAC
LRL-DEBRIS

Hurricane DE#1 Temporary Housing Model

Landfall Plus About 12 Hours

US Army Corps of Engineers

For Planning Purposes Only!

0 100 200 Miles

Post Landfall Temporary Housing Model Results

Model results per County on following page

This model is based on a Category 1 storm making landfall in Delaware Bay area.

Historic Track

Temporary Housing

- < 2,000 units
- 2,000 - 3,999 units
- 4,000 - 5,999 units
- 6,000 - 9,999 units
- > 10,000 units

Information provided on this page displays a Category 1 storm making landfall in Delaware Bay area. These projections are based on information from the NHC (1030 EDT 05/19/2008) forecast. Temporary housing is based on nothing.

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane DE#1 Housing Model	
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Sources: HURREVAC LRL-DEBRIS	Page 7 of 12

US Army Corps of Engineers

Hurricane DE#1 Temporary Housing Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	House Units per State	County	House Units per County
		No Temporary Housing need expected	

Temporary housing is based on nothing.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane DE#1 Housing Model

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Sources:
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Hurricane DE#1 Population Model

Landfall Plus About 12 Hours

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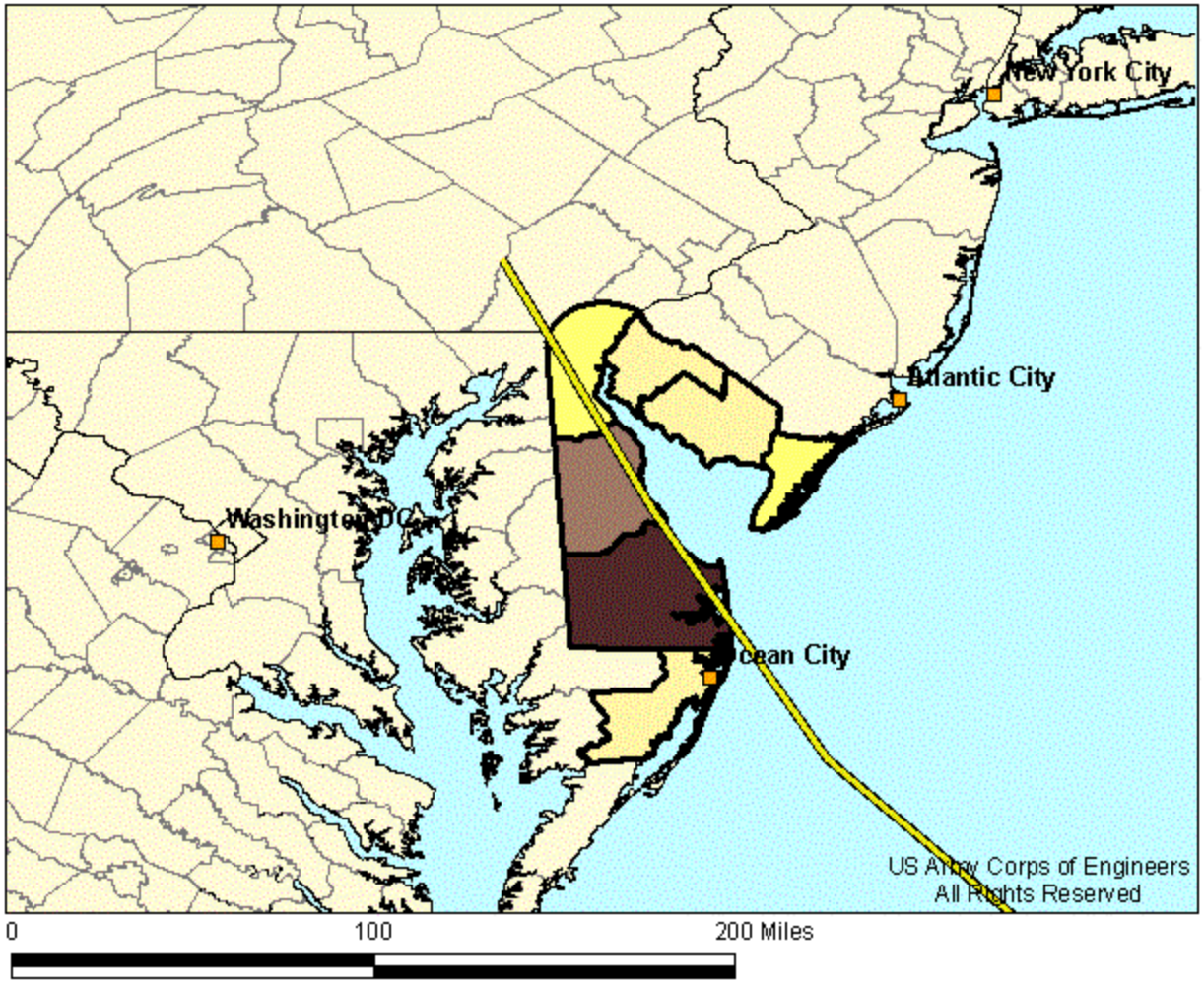

Post Landfall Population Model Results

Delaware - 1,311,000
New Jersey - 59,000
Maryland - 23,000

Model results per County on following page

This model is based on a Category 1 storm making landfall in Delaware Bay area.

Historic Track

Population

- < 25,000 persons
- 25,000 - 99,999 persons
- 100,000 - 174,999 persons
- 175,000 - 249,999 persons
- > 250,000 persons

Information provided on this page displays a Category 1 storm making landfall in Delaware Bay area. These projections are based on information from the NHC (1030 EDT 05/19/2008) forecast. The numbers of persons included in this model output are those that would be included within estimated hurricane force winds (Census 2000 values adjusted to July 2006 values).

Details about this model may be obtained at http://www.englink.usace.army.mil or contact Louisville District staff at DLL-CELRL-GIS@usace.army.mil

Hurricane DE#1 Population Model	
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US Army Corps of Engineers

Hurricane DE#1 Population Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Population per State	County	Population per County
Delaware		Kent	123,000
		New Castle	26,000
		Sussex	1,162,000
Delaware	1,311,000		
Maryland		Worcester	23,000
Maryland	23,000		
New Jersey		Cape May	50,000
		Cumberland	6,000
		Salem	3,000
New Jersey	59,000		

The number of persons estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2006 values.

Details about this model may be obtained at http://www.englink.usace.army.mil
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Hurricane DE#1 Population Model

Generated By:
Siemsen, LRL 1100 EDT 05/19/2008

Sources:
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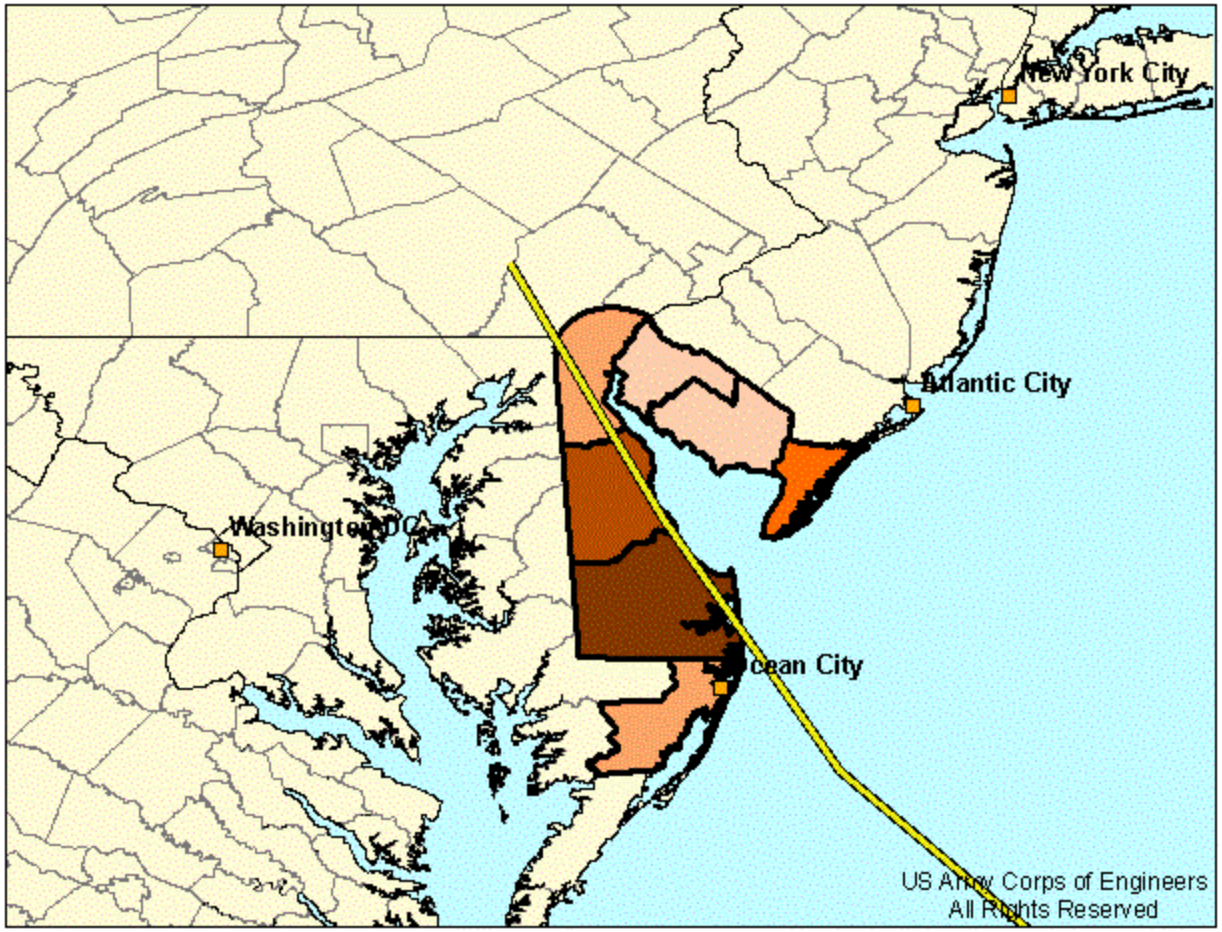
LRL-DEBRIS

US Army Corps of Engineers

Hurricane DE#1 Households Model

Landfall Plus About 12 Hours

For Planning Purposes Only!



0 100 200 Miles

Post Landfall Households Model Results

Delaware - 486,000
New Jersey - 23,000
Maryland - 11,000

Model results per County on following page

This model is based on a Category 1 storm making landfall in Delaware Bay area.

Historic Track

Households

- < 7,500 households
- 7,500 - 14,999 households
- 15,000 - 24,999 households
- 25,000 - 49,999 households
- > 50000 households

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US Army Corps of Engineers

Hurricane DE#1 Households Model

Landfall Plus About 12 Hours

For Planning Purposes Only!

State	Households per State	County	Households per County
Delaware		Kent	46,000
		New Castle	9,000
		Sussex	431,000
Delaware	486,000		
Maryland		Worcester	11,000
Maryland	11,000		
New Jersey		Cape May	21,000
		Cumberland	2,000
		Salem	< 1,000
New Jersey	23,000		

The number of households estimated to be within the hurricane force winds comes from Census 2000 values adjusted to July 2006 values.

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Hurricane DE#1 Households Model

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